

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Withdrawn). A method for detecting at least one organophosphorus or carbamate compound in a sample comprising contacting said sample with enzyme acetylcholinesterase immobilized in a sol-gel or a membrane, wherein the enzyme is inhibited by at least one of the organophosphorus or carbamate compounds.

3. (Withdrawn) The method according to claim 2 wherein the sample is contacted with acetylcholinesterase immobilized in a sol-gel or a membrane wherein the pH ranges from about 5.95 to about 11.52.

4. (Withdrawn) The method according to claim 2 wherein the compound detected is an organophosphorus compound and 1% bromine is added to the organophosphorus compound prior to addition to the immobilized enzyme.

5. (Withdrawn) The method according to claim 2 wherein the enzyme is immobilized in a sol-gel.

6. (Withdrawn) The method according to claim 2 wherein the enzyme is immobilized in a membrane.

7. (Cancelled)

8. (Currently Amended) The detector according to claim 7-19 wherein the acetylcholinesterase is immobilized in a sol-gel.

9. (Currently Amended) The detector according to claim 7-19 wherein the acetylcholinesterase is immobilized in a membrane.

10. (Currently Amended) The detector according to claim 7-19 wherein the package comprises a semipermeable polyethylene bag that contains the membrane or sol-gel immobilized acetylcholinesterase, which semipermeable polyethylene bag is opened after exposure to expose the acetylcholinesterase to the inhibitor to commence the enzyme assay.

11. (Currently Amended) The detector according to claim 4-19 wherein the sol-gel is glass prepared from tetramethylorthosilicate.

12. (Previously Presented) The detector according to claim 11 wherein the acetylcholinesterase is stabilized with a sugar.

13. (Previously Presented) The detector according to claim 12 wherein the sugar is trehalose.

14. (Currently Amended) The detector according to claim ~~1-19~~ wherein the sol-gel is contained in a tube.

15. (Currently Amended) The detector according to claim ~~1-19~~ wherein the sol-gel particles are from 230-400 mesh.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (New) A detector for detecting at least one compound selected from the group consisting of organophosphorus and carbamate compounds which are inhibitors of the enzyme acetylcholinesterase, wherein acetylcholinesterase is immobilized in a sol-gel or in a membrane, wherein said sol-gel or membrane containing acetylcholinesterase is packaged in a semipermeable material that controls access of volatile acetylcholinesterase inhibitors.